## Fall 2010 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including DWR Erosion Survey

### San Joaquin River Basin

RD2063 Reclamation District No. 2063 Crows	Overall LMA Rating	Total LMA Miles				
Landing	U	10.63				
					Encroad	hments
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	CO Miles
Earthen Levee						
Vegetation	2.34		2.34	22.01%		
Trim / Thin Trees	0.01		0.01	0.09%		
Encroachments	0.01	0.01	0.05	0.47%	0.01	
Animal Control	0.10		0.10	0.94%		
Slope Stability	0.01		0.01	0.09%		
Erosion / Bank Caving		0.16	0.64	6.02%		
Crown Surface / Depressions / Rutting	0.24		0.24	2.26%		
Channels						
Encroachments		0.01	0.04	0.38%		
LMA Totals:	2.71	0.18	3.43	32.27%	0.01	0.00

### **LMA District Cover Sheet**

## Fall 2010 Levee Inspection Results

# **Reclamation District No. 2063 Crows Landing**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)			
* Overall LMA Rating (Fall Only)			U				
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effect	ct overall annual rating			
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.  FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.							
Comments							

### **Unit Cover Sheet**

## Fall 2010 Levee Inspection Results

# **Reclamation District No. 2063 Crows Landing**

Waterway Bank Unit Miles										
	Unit No. 01 San	Joaquin River		Right	10.63					
	Spring (March - May)	Summer (June - August)	(September - November) Fall		Winter ber - February)					
Unit Maintenance Rating (Fall Only)										
Date of Inspection	5/5/2010		9/21/2010							
DWR Inspector	Richard Willoughby		Richard Willoughby							
Accompanied By										
Check one:										
<ul> <li>During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.</li> <li>During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.</li> <li>(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).</li> </ul>										
Comments										
information must also be s	3	eet should be signed ar	nd dated by the LMA Represent of 31 (Winter Inspection). Pleast spection Reports of Suite 200	itative an	d returned to					
X Signature of LMA Repres	sentative		Date							

## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

LMR No.	Levee	Mile End	Category	Item	Location *	Rating	Action/Comment	GPS Latitude/Longitude	Issue No. Photo
1	0.02	0.51	Earthen Levee	Vegetation	WS	М	Remove the wild growth other than native grasses from the levee slopes.	37.478550 ° 37.471548 ° -121.044603 ° -121.044553 °	
2	0.02	0.51	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.478548 ° 37.471545 ° -121.044605 ° -121.044553 °	
3	1.19	1.19	Earthen Levee	Animal Control	LS	Α	Exterminate rodents and backfill and compact or grout burrows.	37.465688 ° 37.465688 ° -121.034907 °	
4	1.33	1.33	Earthen Levee	Animal Control	LS	Α	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	37.464643 ° 37.464643 ° -121.032930 °	
5	1.35	1.35	Earthen Levee	Encroachments	LS	PO	Ramp Inspector Comments: Ramp does not meet CVFPB standards. Ramp has 18-20" vertical cut at landside shoulder.	37.464308 ° 37.464308 ° -121.032603 °	
6	1.39	1.39	Earthen Levee	Animal Control	LS	Α	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	37.463875 ° 37.463875 ° -121.032355 °	
7	1.47	1.50	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.462723 ° 37.462303 ° -121.032020 ° -121.031928 °	
8	1.54	1.54	Earthen Levee	Slope Stability	LS	М	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	37.461762 ° 37.461762 ° -121.031822 °	
9	1.57	1.57	Earthen Levee	Animal Control	LS	М	Exterminate rodents and backfill and compact or grout burrows.	37.461322 ° 37.461322 ° -121.031785 ° -121.031785 °	
10	1.69	1.69	Earthen Levee	Animal Control	LS	М	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	37.459813 ° 37.459813 ° -121.032372 °	
11	2.09	2.09	Earthen Levee	Trim / Thin Trees	LS	С	Trim trees to at least five feet above ground level.	37.454593 ° 37.454593 ° -121.032530 °	
12	2.31	2.47	Earthen Levee	Erosion / Bank Caving	LS	U	Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion is accuring around 10-12 inch concrete irrigation pipe at landside toe.	37.451927 ° 37.450290 ° -121.030555 ° -121.028592 °	
13	2.56	2.56	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.449432 ° 37.449432 ° -121.027472 °	
14	2.72	2.72	Supplemental	DWR Erosion Survey	WS	С	Inspector Comments: 10/20/2010: Site has been repaired by the district. Site was previously rated "M". 08/06/2010: Recommended as local maintenance issue, per CLRO. [2010 SiteID: RD2063U01RM105.5]	37.447450 ° 37.447450 ° -121.026090 ° -121.026090 °	
15	2.72	2.79	Earthen Levee	Animal Control	LS	М	Repair the levee slope damaged by livestock and prevent large animal access.	37.447512 ° 37.446574 ° -121.026050 ° -121.025643 °	
16	2.78	2.84	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.446722 ° 37.445925 ° -121.025640 ° -121.025528 °	

* Location	
LS : Land Side	
WS : Water Side	

\*\* Rating

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PO : Partially Obstructing CO : Completely Obstructing N : Not Inspected/Rated

### Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

LMR	Levee	Mile	Category	Item	Location *	Rating	Action/Comment	GPS Latitud	de/Longitude	Issue No.
No.	Start	End	Category	item	tion	ng	Action/Comment	Start	End	Photo
17	2.87	2.90	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.445497 ° -121.025560 °	37.444985 ° -121.025622 °	15
18	3.37	3.42	Earthen Levee	Vegetation	LS	М	Control annual grass and weeds on the levee slopes and easements.	37.440862 ° -121.020817 °	37.440237 ° -121.020372 °	16
19	3.56	3.56	Earthen Levee	Animal Control	WS	Α	Exterminate rodents and backfill and compact or grout burrows.	37.438504 ° -121.019079 °	37.438504 ° -121.019079 °	973
20	3.96	4.10	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.434403 ° -121.014298 °	37.432653 ° -121.013327 °	17
21	4.53	4.53	Channels	Encroachments	WS	U		37.428852 ° -121.007698 °	37.428852 ° -121.007698 °	18 Y
22	4.70	4.74	Earthen Levee	Vegetation	LS	М	Control annual grass and weeds on the levee slopes and easements.	37.429813 ° -121.004970 °	37.430017 ° -121.004335 °	19
23	4.71	4.71	Earthen Levee	Trim / Thin Trees	LS	М	Trim trees to at least five feet above ground level.	37.429892 ° -121.004768 °	37.429892 ° -121.004768 °	20
24	5.12	5.12	Earthen Levee	Encroachments	WS	М	Garbage Inspector Comments: Old pipes on waterside slope should be removed.	37.427375 ° -120.999343 °	37.427375 ° -120.999343 °	21
25	5.13	5.13	Earthen Levee	Encroachments	LS	U	Pipe Inspector Comments: Landowner modified pipe structure and cut into landside slope without permission from CVFPB. See field investigation report for more detail.	37.427210 ° -120.999288 °	37.477210 ° -120.992880 °	50 Y
26	6.05	6.63	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.416235 ° -120.997563 °	37.411285 ° -120.998188 °	22
27	6.09	6.09	Earthen Levee	Animal Control	LS	М	Exterminate rodents and backfill and compact or grout burrows.	37.415887 ° -120.998083 °	37.415887 ° -120.998083 °	5
28	6.89	6.89	Earthen Levee	Trim / Thin Trees	LS	W	Trim trees to at least five feet above ground level.	37.411785 ° -120.993548 °	37.411785 ° -120.993548 °	39
29	7.69	7.69	Earthen Levee	Trim / Thin Trees	LS	W	Trim trees to at least five feet above ground level.	37.403516 ° -120.985718 °	37.403516 ° -120.985718 °	7
30	7.81	7.90	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.402400 ° -120.984087 °	37.401563 ° -120.982775 °	23
31	7.88	7.88	Earthen Levee	Trim / Thin Trees	LS	W	Trim trees to at least five feet above ground level.	37.401774 ° -120.983132 °	37.401774 ° -120.983132 °	9
32	8.06	8.23	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.400930 ° -120.980157 °	37.401148 ° -120.977320 °	24
33	9.44	9.60	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	37.390727 ° -120.962520 °	37.390683 ° -120.959570 °	25

\* Location

LS: Land Side

WS: Water Side

CR: Crown

\*\* Rating

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### Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

LMR	Levee	Mile	Category	Item	Loca *	Rati	Action/Comment		GPS Latitud	le/Longitude	Issue No.
No.	Start	End	Category	пеш	*ation	ng	Action/Confinent	Action/Comment —		End	Photo
34	10.38	10.62	Earthen Levee	Crown Surface / Depressions /	CR	M	Add appropriate gravel or road base. Grade and comp		37.390557° 120.945715°	37.390508 ° -120.941290 °	47

Rutting

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## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

Levee Mile Report Line	5
Start Levee Mile	1.35
End Levee Mile	1.35
Location	Land Side
Category	Earthen Levee
Item	Encroachments
Looking north at ramp ar pad on landside slope wi shoulder.	nd equipment working th a 18-20" vertical cut at

richard\_f\_20101110\_387.jpg

Levee Mile Report Line	5	
Start Levee Mile	1.35	
End Levee Mile	1.35	
Location	Land Side	
Category	Earthen Levee	
Item	Encroachments	
Lastina was at 40 000 wantiast and far range as		

Looking west at 18-20" vertical cut for ramp on landside shoulder and slope

richard\_f\_20101110\_388.jpg

Levee Mile Report Line	8	
Start Levee Mile	1.54	
End Levee Mile	1.54	
Location	Land Side	
Category	Earthen Levee	
Item	Slope Stability	
Looking east at landside slope damage (six to eight inch erosion) by vehicle		

richard\_f\_20101110\_389.jpg







Location LS : Land Side WS : Water Side CR : Crown

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## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

Levee Mile Report Line 8	
Start Levee Mile 1.54	
End Levee Mile 1.54	
Location Land Side	
Category Earthen Levee	
Item Slope Stability	
Looking west at landside slope damage cause by vehicle traffic.	<b>y</b>

richard_f_20101110_390.jpg

Levee Mile Report Line	10	
Start Levee Mile	1.69	
End Levee Mile	1.69	
Location	Land Side	
Category	Earthen Levee	
Item	Animal Control	
Looking east at squirrel holes on landside slope.		

richard\_f\_20101110\_391.jpg

Levee Mile Report Line	12	
Start Levee Mile	2.31	
End Levee Mile	2.47	
Location	Land Side	
Category	Earthen Levee	
Item	Erosion / Bank Caving	
Looking west at slope caving around concrete irrigation pipe on landside toe.		

richard\_f\_20101110\_392.jpg







* Location	
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WS · Water Side	

\*\* Rating

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## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

Levee Mile Report Line	12	
Start Levee Mile	2.31	
End Levee Mile	2.47	
Location	Land Side	
Category	Earthen Levee	
Item	Erosion / Bank Caving	
Looking south at additional caving around concrete pipe.		
richard_f_20101110_393.jpg		

Levee Mile Report Line	12	
Start Levee Mile	2.31	
End Levee Mile	2.47	
Location	Land Side	
Category	Earthen Levee	
Item	Erosion / Bank Caving	
Looking north at site #1 caving around nine on		

Looking north at site #1 caving around pipe on landside slope.

richard\_f\_20101110\_394.jpg

Levee Mile Report Line	12
Start Levee Mile	2.31
End Levee Mile	2.47
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving
Looking west at caving a site #3.	round concrete pipe at







richard\_f\_20101110\_395.jpg

\* Location
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WS: Water Side
CR: Crown

\*\* Rating

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## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

Levee Mile Report Line	12		
Start Levee Mile	2.31		
End Levee Mile	2.47		
Location	Land Side		
Category	Earthen Levee		
Item	Erosion / Bank Caving		
Looking west at concrete irrigation pipe that runs along landside toe.			
richard_f_20101110_396.jpg			

Levee Mile Report Line	12	
Start Levee Mile	2.31	
End Levee Mile	2.47	
Location	Land Side	
Category	Earthen Levee	
Item	Erosion / Bank Caving	
Looking couthwest at site # 4 of slone caving		

Looking southwest at site # 4 of slope caving around concrete irrigation pipe at landside toe.

richard\_f\_20101110\_397.jpg

Levee Mile Report Line	21		
Start Levee Mile	4.53		
End Levee Mile	4.53		
Location	Water Side		
Category	Channels		
Item	Encroachments		
Looking west at garbage, prunning and concrete rubble piles in channel.			
richard_f_20101110_398.jpg			







\* Location
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WS : Water Side
CR : Crown

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## Levee Inspection Report By Mile - Fall 2010

# **Reclamation District No. 2063 Crows Landing**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/09/2010 11/09/2010	Richard Willoughby

Levee Mile Report Line	21	
Start Levee Mile	4.53	
End Levee Mile	4.53	
Location	Water Side	
Category	Channels	
Item	Encroachments	
Looking northwest at garbage in channel.		
richard_f_20101110_399.jpg		

Levee Mile Report Line	25	
Start Levee Mile	5.13	
End Levee Mile	5.13	
Location	Land Side	
Category	Earthen Levee	
Item	Encroachments	
View of cut into landside slope		

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Leves Mile Deport Line	0.5
Levee Mile Report Line	25
Start Levee Mile	5.13
End Levee Mile	5.13
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of concrete stand p landside toe.	ipe and encased pipe on

richard\_f\_20100921\_312.jpg







* Location	
LS : Land Side	
MC · Mater Side	

\*\* Rating

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